

Montana Board of Oil and Gas Conservation Environmental Assessment

Operator: Windy Buttes Reclamation, LLC
Well Name/Number: Windy Buttes Reclamation, LLC SWD #101
Location: SW NW Section 31 T28N R59E
County: Roosevelt, MT; **Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)

Long drilling time: No, 10 to 15 days drilling time.

Unusually deep drilling (high horsepower rig): Double derrick rig 900 HP to drill to 6,016' TD Piper Formation for a Dakota Formation disposal well.

Possible H₂S gas production: None anticipated.

In/near Class I air quality area: No Class I air quality area.

Air quality permit for flaring/venting (if productive): No DEQ permit required, facility is not an oil and gas production facility. Purpose of facility is to dispose of saltwater.

Mitigation:

☐ Air quality permit (AQB review)

☐ Gas plants/pipelines available for sour gas

☐ Special equipment/procedures requirements

☐ Other: _____

Comments: _____

Water Quality

(possible concerns)

Salt/oil based mud: Yes to saltwater drilling fluids. Surface casing hole freshwater, and freshwater mud system to be used.

High water table: None anticipated.

Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral tributary drainage to Shotgun Creek, about 1/8 of a mile to the south from this location.

Water well contamination: None, water wells in the area are 338' and shallower. Closest water wells are about 3/8 of a mile to the south southwest, 3/4 of a mile to the northeast and 1 mile to the northeast from this location. Significantly shallower than the surface casing setting depth of 2000'.

Porous/permeable soils: No, sandy clay soils.

Class I stream drainage: No, Class I stream drainages.

Mitigation:

☐ Lined reserve pit

☒ Adequate surface casing

☐ Berms/dykes, re-routed drainage

☒ Closed mud system

☐ Off-site disposal of solids/liquids (in approved facility)

☐ Other: _____

Comments: 2000' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater drainage.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: None anticipated.

High erosion potential: No, location will require a small cut of up to 6.93' and small fill, up to 2.57', required.

Loss of soil productivity: No productivity loss where the disposal facility is built. Disposal facility has purchased surface lands at the facility.

Unusually large wellsite: No, large well site 330'X158'

Damage to improvements: Slight, current surface use is cultivated land. Surface has been purchased from the current surface owner by Windy Buttes Reclamation, LLC.

Conflict with existing land use/values: None

Mitigation

☐ Avoid improvements (topographic tolerance)

☐ Exception location requested

☒ Stockpile topsoil

☐ Stream Crossing Permit (other agency review)

☒ Reclaim unused part of wellsite if productive

☐ Special construction methods to enhance reclamation

☐ Other _____

Comments: Will use existing roads, State Highway #2 and existing well access road. About 5/8 of a mile of new access road will be built into this location off the existing well access road. Cuttings will be disposed of at a commercial disposal. Drilling fluids will be removed to commercial disposal well. No concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Residences about 3/4 of a mile to the northeast and 1 mile to the northwest from this location. Town of Bainville, Montana is about 3.5 miles to the west from this location.

Possibility of H2S: None

Size of rig/length of drilling time: Double drilling rig 10 to 15 days drilling time.

Mitigation:

☒ Proper BOP equipment

☐ Topographic sound barriers

☐ H2S contingency and/or evacuation plan

☐ Special equipment/procedures requirements

☐ Other: _____

Comments: Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Sufficient distance between location and buildings noise should not be a problem.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: None identified

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species: Threatened or endangered species identified as the Pallid Sturgeon, Interior Least Tern, Piping Plover and Whooping Crane. Candidate species is the Sprague's Pipit. NH Tracker website lists two (2) species of concern. They are as follows: Bobolink and Whooping Crane.

Mitigation:

☐ Avoidance (topographic tolerance/exception)

☐ Other agency review (DFWP, federal agencies, DSL)

☐ Screening/fencing of pits, drillsite

☐ Other: _____

Comments: Private surface lands. There maybe species of concern that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to what he would like done, if a species

of concern is discovered at this location. The Board of Oil & Gas has no jurisdiction over private surface lands.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites: None identified.

Mitigation

avoidance (topographic tolerance, location exception)

other agency review (SHPO, DSL, federal agencies)

Other:

Comments: Surface location is private land. There maybe possible historical/cultural/paleontological sites that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to his desires to preserve these sites or not, if they are found during construction of the wellsite. The Board of Oil & Gas has no jurisdiction over private surface lands.

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: No concerns.

Remarks or Special Concerns for this site

No concerns. Well is a commercial Class II SWD.

Summary: Evaluation of Impacts and Cumulative effects

The drilling of this well will have some short term impacts expected, but no long term impacts anticipated.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): /s/Steven Sasaki

(title:) Chief Field Inspector

Date: November 30, 2011

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center GWIC website

(Name and Agency)

Roosevelt County water wells

(subject discussed)

November 18, 2011_____

(date)

US Fish and Wildlife, Region 6 website

(Name and Agency)

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA
COUNTIES, Roosevelt County

(subject discussed)

November 18, 2011_____

(date)

Montana Natural Heritage Program Website (FWP)

(Name and Agency)

Heritage State Rank= S1, S2, S3, T28N R59E

(subject discussed)

November 30, 2011_____

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection:_____